MN81

You'll see it here first, The INTERFACE '81 Exposition!

You'll hear it here first, The INTERFACE '81 Conference!

9th Annual National
INTERFACE ®'81

The Largest National Conference & Exposition Devoted to Data Communications, Distributed Data Processing and Networking

Co-Sponsored by DATAMATION. Magazine

THE EXPOSITION
You'll See It Here First

The exhibit floor at INTERFACE '81 will include virtually every available product and service related to data communications, distributed data processing and networking.

You will see the state of the art in data communications hardware, software and services. More than 200 of America's top manufacturers will be exhibiting products and services such as: distributed data processing systems. . . line and serial printers . . . minicomputers. . . modems/mux's/couplers. . . front ends/concentrators. . . peripherals. . . net control equipment. . . hard copy and CRT terminals. . . data entry terminals. . . test and disgnostic equipment . . . graphics terminals. . . OCR/OMR. . . data base and telecomm software. . . specialized microwave, satellite and common carrier services. . . value-added services/packet switching. . . fiber optics. . . and more!

In short, you will see everything needed to keep you on the *leading edge* of the communications industries.

THE CONFERENCE
64 Ways To Grow Professionally

This year, INTERFACE '81 will sponsor a 64-session Conference whose theme is "Integration - the Path to Information Productivity." It will address the sweeping impact that the merger of computer and communications technologies is having on all major areas of data communications, distributed data processing and networking. It is destined to change the nature of how we apply computers and communications, from both a functional and technological level.

The Conference will be highlighted by eleven "Special Focus" half-day seminars, featuring national experts in discussions of various core topics, including: DDP, Network Security, Satellite Strategies, International Networking, Fiber Optics, Local Network Developments, Office Systems Planning, Business Graphics, and Technology for Tomorrow.

An additional 53 sessions of conventional length (90 - 120 minutes), including the show's popular "DataComm School" will cover a broad range of technological and management issues, with more than 125 speakers making presentations.

THE EXCITING LOCATION
Business Combines with Pleasure

INTERFACE '81 returns to Las Vegas, the site of the very successful 1978 INTERFACE.

In expanded exhibit facilities, INTERFACE '81 will be held at the beautifully modern Las Vegas Convention Center.

INTERFACE show management has reserved thousands of hotel rooms for INTERFACE attendees at 19 of Las Vegas' most glamorous hotels -- most at special "convention" rates (see registration form, inside back cover). SHUTTLE BUSES will take attendees to and from the convention center and ONLY these "show" hotels.

With a worldwide reputation as a recreation center, Las Vegas offers much for attendees to see and do, either before or after the show. It's the perfect spot to combine business and pleasure!

For all these reasons - and more - it will be to your advantage to attend INTERFACE '81. . . the largest national Conference and Exposition devoted to data communications, distributed data processing and networking.

REGISTER NOW AND AVOID WAITING IN LINE AT THE SHOW! Take a moment and do it now. The Registration and Hotel Reservation Form is on the last page. If time is short, however, call us toll-free: (800) 225-4620 (in Mass., (617) 879-4502). When you register, you can also make your hotel reservations on the same form or with the same phone call.

INTERFACE Conference Sessions

DataComm School

Paralleling the 9-year growth of INTERFACE, DataComm School has kept pace every step of the way. It is here that so many data processing and voice communications professionals, as well as business executives, got their start in data communications. DataComm School continues this year with a series of benefit-oriented, non-technical tutorials guaranteed to provide a firm foundation for further study. . . and productivity!

DS-1
The Telecommunications System

Underlying most data networks is a vast analog communications system with its own architecture, services, regulations, etc. A study of this important dimension will start DataComm School attendees down the road to an understanding of datacomm network design. Pertinent characteristics of analog transmission, line switching, traffic control and transmission media will be explained. The variety of basic services offered by telephone companies will be discussed with emphasis on facilities also used for datacomm.

DS-2
Datacomm Fundamentals

Welcome to the world of data communications and its promise of significant productivity improvements for most organizations. Starting off with a survey of high-impact applications for data communications, this session moves to a description of the essential elements of a datacomm net. Available transmission services, and the interfaces they require, will be covered along with data codes, control features and sending/receiving modes.

DS-3
Datacomm Building Blocks

Taking a closer look at essential network components, this session addresses the operating functions of each element in relation to the overall network. Modems and multiplexers, local and remote front-end processors, net control hardware, terminals and more will be addressed. Software modules essential to controlling centralized or distributed networks will be covered, along with performance measurements to ensure optimum operation. Design considerations for capacity planning, reliability, security, etc., will be addressed.

DS-4
Datacomm Network Concepts

Point-to-point or multi-point, centralized or distributed, long lines or satellite, private or public network concepts can take a variety of configurations. Methods of improving network productivity through use of hardware, software and services are featured. A balance between proven net designs and new concepts will aid attendees in shaping decisions for the future. Briefings on recent developments in packet switching, local net design and large-scale network architectures will help to explain benefits in today's applications for electronic mail, office automation, distributed data processing and more.
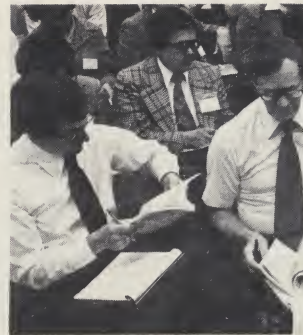
Network Productivity Strategies

As a network spreads and expands to handle new applications and users, those responsible for net performance face significant challenges. Network architectures must be flexible enough to accommodate new systems, software and services. Improvements in network productivity will be the bottom line for those datacomm professionals attending sessions in this important group.

NP-1
Vendor Network Architectures: More Freedom or Restraints?

Weren't network architectures intended to streamline datacomm operations, while offering flexibility in configuration alternatives? As these architectures evolve and enhancements are added, users sometimes find they've been tied to their vendor's marketing philosophy rather than to more freedom in network design. The standard path of operational freedom seems strewn with all manner of obstacles in spite of the progress made in packet switching and local network protocols. A briefing on the proposed Open Systems Interconnection (OSI) architecture will be featured.

NP-2
Strategies for Performance Optimization

This annual favorite of experienced network optimizers offers the latest in procedural strategies and design techniques to "tweak" net performance. Our top-level professionals will share their recent discoveries for improving performance through use of new hardware and software tools. Optimizing network traffic through design modifications, good balancing techniques, real-time monitoring and response measurements, alternate-flow strategies, etc., will be addressed.

NP-3
New Methods of Performance Measurement

Justifying a costly modification to the net can be accomplished. . . if you can isolate the problem and measure its

contending with a growing group of video-based services.

PN-1
Update on Extended Network Services

Satellite Business Systems (SBS) has taken to the air before XTEN and ACS, though others such as TYMNET and TELENET have been offering comprehensive network services for some time. Will SBS and recent regulatory events inspire XTEN and ACS to hasten their efforts? And what are existing carriers planning as they position themselves against these giant entities. Here is the session to find out what extended network services will offer to differentiate themselves in a growing marketplace.

PN-2
Home Information Services: Implications for Industry

"The medium is the message" has never been more vivid, since the homely home television set has now become the vehicle for interactive computing, news reporting, data base access, electronic shopping and banking, etc. New services for the home, whether "piped in" via telephone, cable or satellite, are increasing rapidly. But, what's in it for the business world? Can home information services such as Viewdata, Compuserve, The Source, etc., improve the productivity of a business organization?

Network Control Solutions

Converging technologies, arising from the same digital base, frequently compound the difficulties of implementing comprehensive network control. The new category of structured network architectures may include a varying mix of local nets, distributed nets, private-to-public nets, etc. Inherent in these increasingly complex designs is the growing need for more sophisticated and reliable network control, reaching to the furthermost outposts of the net. This key session group focuses on those new systems and techniques for implementing net control solutions.

NC-1
Control Procedures and Management

Sprawling networks are growing more intelligent and self-controlled in the quest for greater productivity. Developing such network resources requires more emphasis on control strategies and management, according to this session's speakers. Organization and distribution of control centers and functions, they suggest, imply more formalized procedures and reporting systems.

NC-2
Distributing Diagnostic Capability

The question for attendees is not which way to go, but what balance is needed for the optimum mix. Come hear the pros explain how the latest advances in both centralized control (whether host, FEP or net control center) and remote device diagnostic capability can together provide the comprehensive solutions you seek in network management.

NC-3
New Tools and Systems for Net Control

Complex networks demand comprehensive controls. But, does the additional complexity added by new network control tools always result in an improved system? Advanced tools and systems should improve network availability and adaptability and provide users with comprehensive and timely information about network usage and outages. Attendees must be prepared to decide on whether and which recent advances will bring greater control benefits at justifiable costs.

The Integrated Office

You're invited to witness the breakdown of the traditional office. On both functional and technical levels, you'll learn how integration of information resources at once breaks down and restructures modern office environments. Integration of office information tools, systems and services offers considerable potential for improved productivity of office workers and their management. Data communications is the cause for such technological togetherness. Voice, data and video transmission can occur on the same transmission utility. It will all come together in this key session group.

IO-1
What Mode for Which Message: Office Automation Theory and Planning

Promises of significant productivity improvements offered the justification for bringing information technology into the office. Reducing paper flow, while increasing information flow, was supposed to free office workers and executives to handle more important tasks. Benefits like these, however, require logical approaches to office systems implementation, as well as intelligent and comprehensive planning. Integration of data and word processing plus electronic mail, tele/video conferencing, and more, is now beginning to complicate the office scene.

IO-2
Electronic Mail Today. . . and Tomorrow

Lots of users are talking about electronic mail, and a growing number are actually taking the plunge. Various approaches to E-mail implementation have yet to result in a universally accepted method. Communications carriers and shared-service organizations offer E-mail services. The

U.S. Postal Service has started its own experimental E-mail operation. Vendors of hardware/software E-mail solutions are active and on the increase.

IO-3
Fax Meets Micro:
New Alternatives for Users

The age of facsimile communication is upon us. Microprocessor technology has helped to bring it about. Sub-minute transmissions around the world or around the block have increased productivity for many. Find out what more fax can do for you in the area of text and graphic communications. Learn how word processing, fax transmission and high-speed printing can be integrated for improved performance and productivity in many office networks.

IO-4
Where Teleconferencing Can Win

An energy crisis has revitalized many an organization's lagging commitment to teleconferencing. Now broadened to include transmission of video signals, as well as data, voice and fax transmissions, teleconferencing may prove to be the most visible cost-saving application of the decade. Applications where cost of this cost-saver are not a deterrent will be discussed by our panel of experts.

Word Processing Trends

Find out how you can increase the productivity of your network by adding a key function of the integrated office: word processing. It's not just another application. Its different requirements for input, storage and output imply network design changes. Intelligence in wp controllers may serve other purposes in the net. You can take a giant step toward the automated office by attending these important sessions.

WP-1
New Dimensions for Text Processing

The text processing application is expanding, as its versatility becomes more recognized. Operating systems are controlled by text, so it's reasonable for programs written in text processing language to supervise them (UMIX is an example). File management can be handled similarly for safety and security in the office environment. Text processing can also do what word processing does, with the difference that features protecting format are preserved in the text, permitting reformatting and multiple publishing from data bases. Text processing permits different display devices to be driven from the same file for COM and photocomposition.

WP-2
The WP Controller as Network Node

During the decade of the 80s, the word processor will evolve from an automated typewriter to a major component of the "office of the future." While even the earliest word processors had basic communication capabilities, the emergence of "electronic mail" as a promising new communications tool has heightened interest in the applications of these features. Now, elaborate networks of stand-alone or clustered terminal systems offer WP capabilities. WP controllers in these networks may serve multiple functions of multiplexing, code conversion, etc. This session discusses the trends and technology of the WP controller in this exciting new role.

WP-3
Optimizing Network Design
for Word Processing

Incorporating word processing capability into the net is a piece of cake. Right? Well, not always. Those who've done it know better. Let them advise you on what approaches to WP can optimize your operation. Discover the right way to set up local nets for more word processing throughput. Learn from these experts about design strategies to achieve greater productivity in remote, clustered WP environments.

DP Systems in Transition

Will changes in DP systems to come leave you behind? A new generation of mainframes from IBM heads the list of processor developments for the decade of the 1980s, but equally significant developments are occurring with mini and microcomputers. Several vendors are now offering 32-bit minicomputer systems, featuring one or more megabytes of directly addressable main memory. Similarly, leading chip manufacturers are upgrading from 8 to 16 bits. New cost/performance alternatives are opening up for systems users at a variety of levels.

ST-1
Mainframe Migration in the 80s

What mainframe hardware and software configurations will you be using over the next five years? Some have quick answers to that question - perhaps too quick. As the architectural center for most networks, the mainframe and its associated peripherals tend to dominate not only the network's design, but also its implications. Session speakers will argue that user needs should come first. The functions and applications you need to perform should guide your selection of mainframe systems. An assessment of available and planned mainframe features with respect to major functions and applications areas will be offered.

ST-2
32-Bit Mini Marvels

The "superminis" are on parade for users with requirements for higher
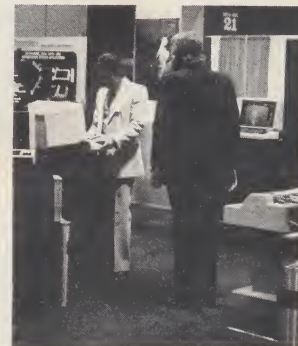
minicomputer performance levels. Now available from several vendors, these 32-bitters are providing comprehensive number-crunching and data base applications. Many of these new processors are compatible with their 16-bit predecessors, which have been a leading force in implementing DDP. Industry experts will help attendees appreciate where the 32-bit machines fit most appropriately in the datacomm world.

ST-3
Micros for Information Networks

Microcomputers are proliferating through the net at a rapid rate. The "toy" image is being replaced by the "workhorse" image for users aware of today's microcomputer capabilities. Microprocessors and LSI/VLSI data communications controllers are already being used to interface terminals and computers to packet-switched networks. Session attendees will learn how microcomputers are becoming more acceptable alternatives for a variety of network chores. Their use in local networks will also be examined.

Data Base Developments

How well you manage data base activities may well determine success for many of your organization's programs. Whether the application is financial analysis, inventory control, employee reporting, etc., the data base is central to its accomplishment. New trends suggest data bases can be application and device-specific. They can be distributed for total or limited remote access. Hardware has been designed specifically for data base processing to off-load the mainframe. Tune in to these key sessions to access the latest insights on improving your knowledge of data base operations.

DB-1
Data Base Trends for the 80s

Data base management systems are rapidly changing, not only in technology, but in level of application as well. The 1980s will see data decentralized by both function and geography: a reversal of the host/satellite relationship, with the "host" acting as network integrator; the data base becoming a macro-concept rather than a collection of micro-application support software; and increasing implementation of data base hardware. This 90-minute session will crystal-ball the future of the data base from an insider's viewpoint.

DB-2
Criteria for Data Base Distribution

Distributing a data base is almost a contradiction in terms, since an original function of the data base was to centralize files. However, files or portions of files are often more purposefully located in operational offices outside the computer room. On the increase is a relational type of data base handling, where duplicate or partitioned segments of the central base are used at remote locations. Professionals will address the criteria for such a distribution of data base activity, for not every attendee's application can be solved this way.

DB-3
Fine-Tuning Data Base Management Systems

Networks are increasingly emanating from, and intersecting with, data bases. Increased data base productivity is resulting from creative applications of data base management, hardware and software. Session attendees will learn new techniques of file management, file access, and report generation which are crucial for effective use of time and resources. Examples will be drawn from application areas closely related to data communications.

Packaging Software Solutions

You could be a hero, if you could solve the software problem your organization faces. Innumerable manpower studies offer the grim forecast of a serious shortage of programmers in this decade. A glance through the employment advertising pages of trade and consumer publications provides much evidence that a crippling shortage of programmers may already be upon us. Interim solutions include a much greater reliance on off-the-shelf packages, plus the embedding of systems software into the hardware itself (so-called "firmware").

PS-1
Filling the Software Gap

You've at least read about the software crisis, if it hasn't hit you in the wallet. . . yet! That crisis is typically defined as not having enough of the right programming talent to fill the growing need. Is the gap between demand and talent a real one for users? Software houses are touting pre-packaged solutions. Others say the crisis is artificial, and that lack of standards is developing too specific a class of programmer. What is obvious is that users are faced with software tasks taking exorbitant amounts of time, money and people.

PS-2
Operating System Software: The Critical Links

What drives a datacomm network? Software does. Software in the host computer, front ends, network nodes and terminal systems interrelate as operating system software. Operating systems, telecommunications monitors, access methods, etc., the critical links between these software modules, often create planning and operational headaches for users. Our session

speakers will help to explain software relationships in the total system, while updating attendees on recent enhancements to these linking routines.

PS-3
Integrating Multiple Applications

In a data base/datacomm environment, the integration of several packaged solutions will take experience that few have presently attained. Traditionally, the process of adding applications to a data base takes considerable time for development and testing. Datacomm professionals will learn quickly that the traditional time for implementation is no longer available for packaged software, and yet the interfacing problems are still bound to exist. The situation becomes even more challenging when several off-the-shelf packages are to be integrated simultaneously.

PS-4
Software Tools for
Data Base Management

Driven by the user demand for comprehensive DBMS solutions, several vendors now offer a variety of new software tools. Pioneers in DBMS package design have long since provided communications interfaces essential to network operations. Today, their offerings go much further in facilitating the integration of specific applications to a datacomm-oriented data base management system. Here's the place to catch up with the latest offerings available, as session speakers describe and analyze the potential these packages offer to meet specific operating requirements.

Peripheral Highlights

What more can you ask of your peripherals? Since the wave of integrated technologies hit, peripherals are taking on diverse functions to streamline data processing and data communications operations. From the largest to the smallest magnetic media, higher capacities and lower costs offer new applications advantages. Communicating copiers and laser printers are matched in technological advances by the ubiquitous teleprinter. Graphics terminals are offering a colorful assortment of enhancements. And the ideal work station is beginning to take shape

PH-1
Mass Storage: Is There Any Limit?

Developments in mass storage technology are shaping anew our concepts of computer and terminal capability. Standard forms of data storage are undergoing increases in their capacities. Advances in semiconductor memory technology and random access disk memory can offer terminals the power of mainframes. Winchester-type drives using disks as

small as 5¼ inches can now deliver up to 30 megabytes of on-line storage. What these developments mean to datacomm planners is this session's principal emphasis.

PH-2
Graphics Terminals

"Beautiful" is the word most often uttered by the financial executive viewing complicated data expressed in simplified color graphics. As never before, information networks are reaching such executives through graphics terminals. Can graphics systems fit into your network picture? You'll discover the benefits of various graphics terminals and systems, as well as considerations for successful implementation. Prepare for an eye-opening session!

PH-3
Teleprinter Technology in Transition

No product has better represented the expansion of the computer industry and the distribution of its processing power over the last 20 years than the ubiquitous teleprinter. From the old bulky 10-cps "clunker" to today's sleek tabletop 120-cps devices, teleprinters represent "computing" to more end users than any other system component. Compact size, speed, print quality, reliability and cost -- these are the features users will be asking for in the future, and what the major manufacturers will be offering.

PH-4
Work Stations Integrate
Multiple Functions

Like many such devices in the evolution of technology, the multi-function work station has too many definitions and too few standards. This session represents an attempt at some early (and much needed) clarification, so that the systems planner can consider the possible DP, WP,communication and user-friendly aspects of the station. Currently, there are more questions than answers. This session hopes to redress the balance.

Digital Communications Progress

Find out where you stand on the path to digital communications. Billions of dollars are being spent in this decade to convert the nation's transmission plant from analog to digital modes. Users are budgeting their own dollars for a similar internal conversion reaching down to the handset level. This session group will give you the perspective you need to plan the next step for your organization. The latest techniques and approaches for total or partial conversion to digital communications will be addressed.
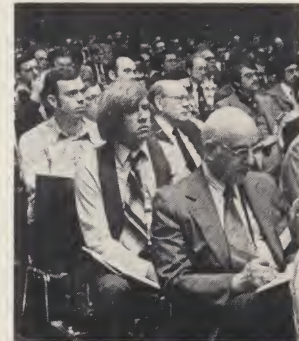
DC-1
Digital Communications: An Overview for the 80s

As with much that's technologically innovative, digital communications is following an evolutionary rather than revolutionary growth pattern. Communications carriers are leading in the implementation of digital capability at switching centers; users are seeking more digital capability in their services and local interconnect devices. Don't miss this update on the quest for digital productivity. Find out where the technology is heading, in what time frame, and how well you are prepared to follow.

DC-2
Digital Pathways Available Now

Taking a step down the digital path has never been easier. A variety of communications services now employ some measure of digital transmission capability. Suppliers offer all the components for building private, digital nets. From branch exchange to local net to handset/terminal, all you need for converting to an all-digital facility already exists. Those exploring new avenues for increased productivity will come closer to their goals with the help of this session's speakers.

DC-3
User Preparation for the Digital Future

Though many users are already knee deep in conversion to digital communications, many others are in a quandry as to when and where to start. This session will help managers and net designers move forward by offering strategies to develop a logical progression for your conversion. Digital transmission services represent the simplest way to get started. Speakers will address what to consider before choosing various alternative services. The digital implications of local network approaches will be highlighted.

Integrating Information Resources

Does the integration of technology have you in a tailspin? For many, it's difficult to hang on, and unthinkable to let go. Waves of technological change are sweeping through the user environment. The solution lies in the intelligent integration of a variety of information at both functional and technical levels. Information resource management can easily see the functional benefits of combining voice and data communications, word and data processing, public and private networks, etc.

IR-1
Emerging Voice/Data Networks

Voice and data communications are merging at various points in today's networks. Some are using digital transmission services to carry both types of traffic. Others have installed interconnect systems to convert selected channels for voice or data, while an increasing number are going the complete digital route from handset to handset. Net designs are emerging that can accommodate voice/data integration in stages, according to immediate and future organization needs. Just how datacomm planners can prepare themselves for a relatively painless evolution to an "ultimate" network is the purpose of this session.

IR-2
The CBX as Network Integrator

PBX/CBX equipment and peripherals will be in the forefront of significant applications in the 1980s. These advanced systems will offer users a variety of functions beyond simple voice switching -- modem pooling, voice/data multiplexing, telemanagement, and a number of conversion facilities. The PBX/CBX will, therefore, become an increasingly important network element, particularly as a gateway in local networks. Session attendees will learn more about the continuing evolution of advanced PBX/CBXs, the leading vendors, upcoming products, new functions, and modes of network integration.

IR-3
Integrating Private and Public Networks

Expansion through public nets is a least-cost alternative for many private net users. A new set of issues then faces such users because of the inherent incompatibilities involved in the integration of two distinctly different network structures. Sign-ons, transmission delays, host interfacing problems, etc., tend to present hurdles to successful interconnection. Help is here in the form of experienced pros who've been through the integration process.

IR-4
Clearing Network Compatibility Hurdles

While end users seek more specific solutions to their various application needs, datacomm professionals must accommodate an increasing variety of hardware, software and transmission characteristics. Incompatibility among vendor offerings and lack of universal standards have caused net managers to seek unorthodox solutions. Those who've learned to leap or skirt, or otherwise dance around these hurdles, will recommend workable alternatives, including protocol translators and software emulators.

Information Productivity: Integration Is Key

Top management is functional in its approach. Middle management is technology-oriented. Both groups of managers have much to learn from

each other. *Top management must heighten its awareness of the new wave of technological convergence. Middle management must assess functional alternatives and strategies within the context of integrated technologies. This delicate interface, between function and technology, between top and middle management, will be the focus of new approaches toward improving productivity.*

IP-1
Relating Information Productivity to Corporate Growth

Shoichi Akazawa, a senior executive of Fujitsu, Ltd. recently said, "Our primary goal must be to make Japan into a technology-based society. . . neither labor-intensive nor capital-intensive, but brain intensive." U.S. industry must make a similar transition. With executive management demanding instant access to larger and more complex decision support systems, INTERFACE attendees are faced with the twin challenges of managing user expectations and controlling the rate of change.

IP-2
Information Requirements: Definition and Planning

Of the myriad of potential applications, which can realistically offer the prospect of growth for the corporation, how does the manager choose? From the top, growth situations can often be disguised as something other than an information management opportunity. Too often, professionals have to wrestle with an information problem after the application is imposed on them. Alternately, managers can begin to structure the information requirements of the organization as an integrated whole, where applications can be implemented according to information priorities.

IP-3
Integrated Solutions for Information Resource Managers

Converging technologies are creating opportunities for greater productivity in organizations prepared to apply such advances. Data and word processing, voice and data communications, fax, high-speed copy distribution, electronic mail, DDP -- these and more are candidates for further integration within information networks. Session speakers will focus on several of these converging technologies to explore the importance of information resource management in the integration process.

IP-4
Decision Criteria for Integrating Information Resources

With so many alternatives, decision makers are forced to bypass good information network enhancements for better ones. Establishing priorities for integration is part of a comprehensive planning process that results in a decision criteria to ensure optimum progress. Each separate area of integration -- whether data and word processing, data and voice communications, word processing and E-mail, etc. -- requires its own analysis. Yet our speakers will suggest how a basis of technological and management considerations for each move forward can lead to success.

Issues for the Information Industry

Whatever your position in the information industry, you cannot escape the impact of its policy-makers and regulators. Unlike the industrial revolution before it, the so-called "information revolution" seems to proceed without inherent limitations of any kind. And, further, it proceeds at an accelerating pace.

INTERFACE '81 will update attendees on major issues such as our ability to cope with the rapid integration of technologies, a new Presidential commitment, a reorganized AT&T, and the growing problem of unresolved standards.

II-1
KEYNOTE: Information Flows: The Coming Together

It is time we stepped back to observe the meanderings of our information streams as they flow toward tomorrow's challenges. Our jobs, organizations and world leadership are caught in this tide. Great waves of change occur as we evolve from a nation born of manufacturing and mass production to a nation directed by applied intelligence. Our most important resource may well be our information technology. Yet, we must be more alert to technology's drift and the potential applications it spawns. From converging streams, we are creating new information flows of spectacular promise.
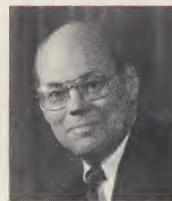
Robert C. Hall
President and CEO, Satellite Business Systems
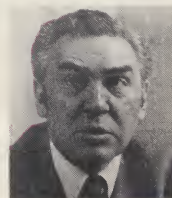
William S. Anderson
Chairman of the Board and CEO, NCR Corporation

II-2
AT&T Reorganization

While AT&T certainly anticipated its own "reorganization," the Justice Dept. and AT&T competitors kept the pressure on to make it happen. The results will take some time to evaluate fully. Attendees will get an in-depth examination of anticipated services to come from AT&T's "Fully Separate Subsidiaries." It is suggested two such divisions will exist: The Business Unregulated Subsidiary and the Residence Unregulated Subsidiary. Each subsidiary is projected to have manufacturing, enhanced services, research and marketing organizational segments. These subsidiaries may in turn "reorganize" the computer/communications industry!

II-3
Comprehensive Standards: Will They Arrive in Time?

Users and vendors can be together, or at odds, on almost any regulatory or standards issue. As we approach greater deregulation and acceptance of equipment and network standards, the potential for increased productivity goes up. But will we achieve our goals in time to maintain our information technology's rate of progress at home and our leading edge position worldwide? This session offers the thoughts of leading theoreticians on how to resolve the dilemma before it's too late. Those regulatory and standards issues of current significance will be the focus for constructive suggestions.

Program Schedule

MONDAY - *Exhibits Open 12:00 Noon - 5:00 p.m.*

Time	Code	Session	ROOM NUMBER
9:00-10:00	II-1	Keynote	A1-A6
10:15-11:45	DI-1	New FEPs and Port-Contention Devices	E1
	IO-1	What Mode for Which Message: Office Automation Theory and Planning	B2&3
	PS-1	Filling the Software Gap	B1
10:15-12:15	DS-1	The Telecommunications System	E2&3
	SF-1	Special Focus: Datacomm Perspectives	D1&2
2:00- 4:00	DS-2	Datacomm Fundamentals	E2&3
2:00- 5:00	SF-2	Special Focus: International Networking	A5
	SF-3	Special Focus: Local Networks	B1
	SF-4	Special Focus: Business Graphics	E1
3:30- 5:00	DP-1	Distributed Data Processing Comes of Age	D1&2
	NP-1	Vendor Network Architectures: More Freedom or Restraints?	G1&2
	DC-1	Digital Communications: An Overview for the 80s	B2&3

TUESDAY - *Exhibits Open 10:00 a.m. - 5:00 p.m.*

Time	Code	Session	ROOM NUMBER
9:00-10:30	IR-1	Emerging Voice/Data Networks	D1&2
	DB-1	Data Base Trends for the 80s	A6
	PN-1	Update on Extended Network Services	B2&3
	IO-2	Electronic Mail Today. . . and Tomorrow	G1&2
9:00-11:00	DS-3	Datacomm Building Blocks	E2&3
9:00-12:00	SF-5	Special Focus: Fiber Optics	B1
	SF-6	Special Focus: Network Security	E1
11:00-12:30	DB-2	Criteria for Data Base Distribution	A1
	NP-2	Strategies for Performance Optimization	G1&2
	PN-2	Home Information Services: Implications for Industry	B2&3
	WP-1	New Dimensions for Text Processing	A5
	ST-1	Mainframe Migration in the 80s	A3
	DI-2	Getting More from Modems and MUXs	D1&2
2:00- 4:00	DS-4	Datacomm Network Concepts	E2&3
	DS-1	The Telecommunications System (R)	E1
2:00- 5:00	SF-7	Special Focus: Distributed Data Processing	A6
	SF-8	Special Focus: SBS and Alternatives	B1
3:30- 5:00	PH-1	Mass Storage: Is There Any Limit?	A1
	IP-1	Relating Information Productivity to Corporate Growth	G1&2
	DC-2	Digital Pathways Available Now	B2&3
	II-2	AT&T Reorganization	A5
	IR-2	The CBX as Network Integrator	D1&2
	PS-2	Operating System Software: The Critical Links	A3

WEDNESDAY - *Exhibits Open 10:00 a.m. - 5:00 p.m.*

Time	Code	Session	ROOM NUMBER
9:00-10:30	NP-3	New Methods of Performance Measurement	G1&2
	WP-2	The WP Controller as Network Node	A5
	IP-2	Information Requirements: Definition and Planning	E2&3
	PS-3	Integrating Multiple Applications	A3
	PH-2	Graphics Terminals	A1
9:00-11:00	DS-2	Datacomm Fundamentals (R)	E1
9:00-12:00	SF-9	Special Focus: Office Systems Planning	B1
11:00-12:30	DP-2	Criteria for DDP Applications	A5
	IO-3	Fax Meets Micro: New Alternatives for Users	G1&2
	NC-1	Control Procedures and Management	B2&3
	ST-2	32-bit Mini Marvels	A3
	IR-3	Integrating Private and Public Networks	D1&2
2:00- 3:30	IO-4	Where Teleconferencing Can Win	D1&2
	WP-3	Optimizing Network Design for Word Processing	A6
2:00- 4:00	DS-3	Datacomm Building Blocks (R)	E1
2:00- 5:00	SF-10	Special Focus: SNA '81 Update	B1
3:30- 5:00	II-3	Comprehensive Standards: Will They Arrive in Time?	G1&2
	PH-3	Teleprinter Technology in Transition	A1
	IP-3	Integrated Solutions for Information Resource Managers	E2&3
	DC-3	User Preparation for the Digital Future	B2&3
	DP-3	Issues in DDP Implementation	A5
	PS-4	Software Tools for Data Base Management	A3

THURSDAY - *Exhibits Open 10:00 a.m. - 3:00 p.m.*

Time	Code	Session	ROOM NUMBER
9:00-10:30	NC-2	Distributing Diagnostic Capability	B2&3
	PH-4	Work Stations Integrate Multiple Functions	E2&3
	IR-4	Clearing Network Compatibility Hurdles	D1&2
	DB-3	Fine-Tuning Data Base Management Systems	A3
9:00-11:00	DS-4	Datacomm Network Concepts (R)	E1
9:00-12:00	SF-11	Special Focus: Satellite Strategies	B1
11:00-12:30	IP-4	Decision Criteria for Integrating Information Resources	E2&3
	ST-3	Micros for Information Networks	A3
	DP-4	Technology Advancements Impact DDP Users	A5
	NC-3	New Tools and Systems for Net Control	B2&3

Special Focus Sessions

Over the years, the INTERFACE Program Committee has noted that the treatment of certain core subjects can be enhanced by extending available time beyond the format of the conventional 90-minute session. This year, INTERFACE '81 offers conference attendees a total of 11 SPECIAL FOCUS Half-Day Seminars, taught by distinguished experts. These 3-hour seminars will present in-depth treatment of major subject areas relevant to the job concerns of a broad variety of EDP-Datacomm professionals.

Ralph Berglund (SF-1)   Richard L. Deal (SF-1)   Leonard Elfenbein (SF-2)   Frank Dzubeck (SF-3)   Dr. Joel Orr (SF-4)   Dr. Del Hanson (SF-5)
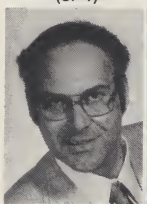
Lawrence Dietz (SF-6)   Dr. Howard Frank (SF-7)   Max Beere (SF-8)   Einar Stefferud (SF-9)   Dr. Dixon R. Doll (SF-10)   John E. Nuwer (SF-11)
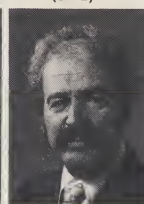
Datacomm Perspectives (SF-1)

Executives at all levels experience "future-shock" from rapid advancement in information and communications systems technology. The trade press and industry meetings emphasize such "hot buttons" as integrated voice and data, local networks, fiber optics, satellite systems, networking, services such as XTEN and ACS, and other technological advances that will impact business and society in this decade.

How can the typical, busy manager get a handle on the fundamentals, the essence of these developments, and their potential application? This Special Focus session will begin that process by presenting a highly condensed overview of these and other key topics. The session will provide a broad perspective on the underlying concepts, a summary of marketplace realities today, and projections of what may be coming near term. Managers will be better equipped to relate their own unique needs and interests to the wealth of other INTERFACE sessions.

International Networking (SF-2)

Spanning the globe with datacomm links is the desire of most multinational companies. This desire grows more difficult to achieve, in spite of technological progress. Country by country, idiosyncrasies and regulations involving data processing and communications are becoming major obstacles in the path of datacomm professionals. What's new in network design, theory and practice, to circumvent these international pitfalls will be addressed. Attendees will be updated on the service offerings of international carriers.

Local Networks (SF-3)

From the ground up, local networks have been structured as the critical vehicle for inter- and intra-building information dissemination. High-speed digital links needed to tie office information systems together are now the concerns of datacomm network topologists. New products are being introduced to simplify the local-net designer's chore, while offering improved connectibility and functionality. Short-haul modems, fiber optics, cable links, etc., will be covered in this important session. Attendees will gain insights from experienced professionals on problem-solving, cost-saving implementations of local networks.

Business Graphics (SF-4)

Interest in business graphics is coming from the top down. Executives recognize the advantages in charting and observing progress on a colorful display, versus reams of hard-to-comprehend printouts. Alternative approaches to delivering such capability imply powerful data base software and, often, expensive graphic terminals. Solutions range from shared services, to on-line terminals, to stand-alone graphics systems. Those who will be responsible for meeting these needs in the executive suite will find this session a great step forward.

Fiber Optic Link To The Future (SF-5)

What was initially conceived to carry thousands of voice conversations between telephone central offices is now beginning to shed light on local area data networks. Fiber optics can provide error-free transmission in noisy environments, eliminate electromagnetic emission in order to meet new FCC standards, transmission links between CPUs and high speed peripherals, and even long distance links to remote terminals and data acquisition equipment. Users attuned to innovative solutions will find this session highly instructive and purposeful. Emphasis will be given to new applications, link selection criteria and end user installation issues.

Network Security (SF-6)

Information processing networks may be located within a building, across a nation or around the world. Establishing a reasonable degree of network security in the morass of terminals, processors, data bases and communications channels has become a top priority for many organizations. Where proprietary data exists, there also exists the need for a secure-network strategy that may use a variety of management approaches, new technologies, and systems approaches. This session will emphasize areas where net security is a critical function.

Distributed Data Processing (SF-7)

Distributed processing, a trend fueled by today's rapidly decreasing costs of computer hardware, is becoming an inevitable part of the modern organization's future. A major problem is to manage and control the proliferation of computing resources as they extend beyond the conventional domain of the data processing group into end user operations. This session will address evolutionary paths for distributed computing, management criteria and trends, and traps for the unwary. The session will focus on the identification of critical technical and management issues which impact the successful adoption of the new technology. Throughout the presentation, real world examples will be used to illustrate key points and issues.

SBS and Alternatives (SF-8)

Now that SBS has beaten ACS and XTEN into the extended network services business, users have some big decisions to make. Do only the largest user organizations have enough data traffic to make SBS cost-effective? Since SBS has broadened its offering to include the smaller voice user as well as the larger, what are overall communications implications for users with both voice and data requirements? This session will bring attendees up to date on SBS services and whether, when and how to use such high-volume transmission to complement network operations.

Office Systems Planning (SF-9)

Broadening one's perspective on the integration of office systems may be critical to making real progress. Those presently automating office functions in a piece-meal fashion may be solving some problems, but creating others. This session attempts to provide a larger picture of where and how new technologies can and will inter-relate in the office environment. Emphasis will be on the management of the planning for, and implementation of, the integrated office. Presentations in this session will be based largely on actual case histories from leading organizations.

SNA '81 Update (SF-10)

Every IBM user is faced with the prospect or propagation of that company's System Network Architecture (SNA). The prolific announcements IBM has made impact SNA implementation in many cases. Users will gain a fuller perspective of how their overall SNA strategy can change to accommodate these new products and enhancements. Trends in the continuing evolution of SNA will be addressed to aid decision-makers in planning their next steps toward more productive use of this architectural environment.

Satellite Strategies (SF-11)

Users have yet to take solid advantage of satellite facilities for the transmission of voice and data. Accelerated movements in satellite technology and applications are leaving many users behind. This session will address the importance of satellite links for achieving greater network productivity. Attendees will be aided in understanding the applicability of satellites to their requirements. New service offerings from satellite carriers will be discussed. What lies ahead in this high-flying area will also be discussed.

Here is a partial list of exhibiting companies. . .

Able Computer
ADC Telecommunications
Addington Associates Inc.
Alanthus Data Communications Corp
Altos Computer Systems
Amco Engineering Co.
Amdahl Corp.
American Satellite Corp.
Analog Technology Corp.
Anchor Pad International, Inc.
Applied Data Communications
Astrocom Corp.
Atlantic Research Corp.
AUERBACH Publishers Inc.
Avanti
BBN Computer
Belden Corp.
Belden Corp. Interconnect Div.
Bell System
Benwill Publishing Corp.
Blackbourn Inc.
Cahners Publishing Co.
Canoga Data Systems (Div. of Perkins
    Research & Mfg. Co.)
CMP Publications, Inc.
Codata Systems Corp.
Codex
Cognitronics Corp.
Columbia Data Products Inc.
Com Design
Compre Comm, Inc.
Computer Automation
Computer Dealer
Computer Decisions
Computer Design
Computer Products
Computer Roomers, Inc.
Computer Systems News
Computer Times
Computer Transceiver
Computerworld
COMSAT
Convergent Technologies
Datacomm Management Sciences, Inc.
Data Communications Magazine
Data-Control Systems
Data Decisions, Inc.
DatagraphiX
Datamation Magazine
Datapro Research Corp.
Data Set Cable Co., Inc.
Datasouth Computer Corp.
Datastream Communications Inc.
Data/Switch Corp.
Datatronix, Inc.
Datentechnik Ges.m.b.H.
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Epicom, Inc.
E-Systems Inc.
Expandor Inc.
Exxon Enterprises/Div. of Optical
    Information Systems
Fairchild Publications
G.A. Field Personnel Consultants
FiQuench Fike Metal Products
Formation Inc.
Gandalf Data Inc.
General Datacomm Industries
Giltronix, Inc.
GTE Communications Network Systems
Halcyon Communications Inc.
Hamilton Sorter Company Inc.
Harbor Electronics Inc.
Hekimian Labs Inc.
Hewlett-Packard Company
IBM Corp. Data Processing Div.
ICOT Corp.
Informer, Inc.
INFOSYSTEMS Magazine
Infotron Systems Corp.
Innovative Digital Equipment (IDE)
Innovative Electronics Inc.
Intelligent Terminals Inc.
Interactive Systems/3M
International Data Sciences, Inc.
Intertel Inc.
ITT World Communications Inc.
Kapusi Laboratories
Kinex Corp.
Lanier Business Products
Lear Siegler, Inc.
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MFE Corp.
Micom Systems, Inc.
Modcomp
MSI Data Corp.
MSI Week
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Navtel, Ltd.
NCR Comten, Inc.
The NCR Corp.
NEC America, Inc.
NEC Information Systems
Network Analysis Corp.
Nixdorf Computer Corp.
Northern Telecom Spectron Division
North Star Computers, Inc.
Nu Data Corp.
On-Line Software Int'l
Optelecom
Paradyne Corp.

Penril Corp.
Perle Systems Limited
Phillips Publishing/Data Channels
Power Data Systems
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Qantex Division of North Atlantic
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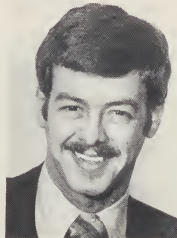
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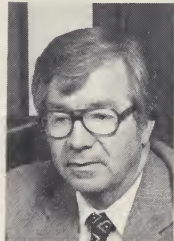
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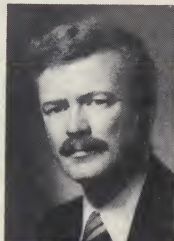
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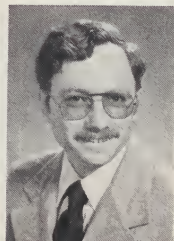
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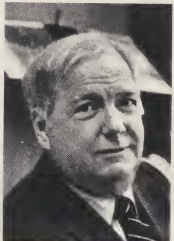
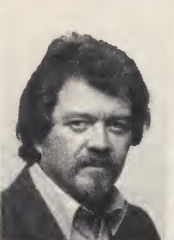**Arnold E. Keller**
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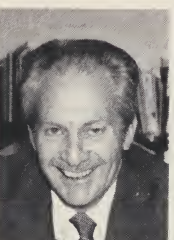*Infosystems*
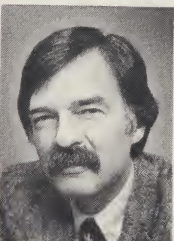
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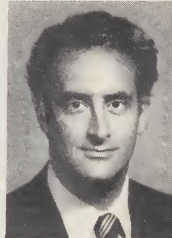
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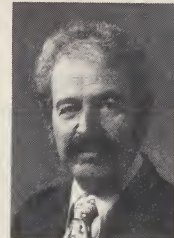**Charles E. White**
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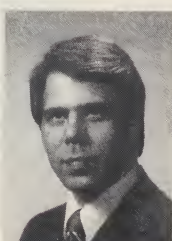(Listed Alphabetically)

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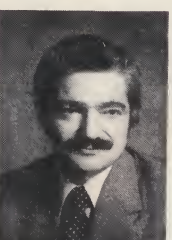President
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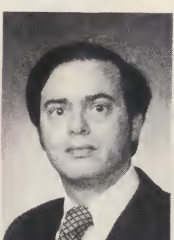Associates

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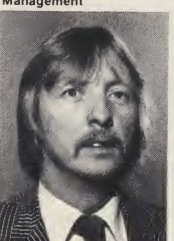President
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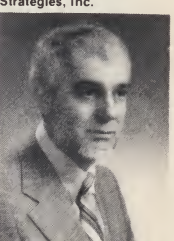Chief of Data Comm.
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UE End User
UQ End User Buying in OEM Quantities
UM OEM

SIZE OF ORGANIZATION

JA Under 100
JB 100-499
JC 500-999
JD 1000-4999
JE Over 5000

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Caesars Palace	$75	$75	$165 & Up	Las Vegas Marina	$43	$43	$110 & Up
Desert Inn	$61	$61	$150 & Up	Maxim	$42	$42	$120 & Up
Dunes	$50	$50	$165 & Up	Riviera	$60	$60	$100 & Up
Frontier	$50	$50	$170 & Up	Royal Americana	$42	$42	$80 & Up
Holiday Inn - Center Strip	$50	$50	$175 & Up	Sahara	$53	$53	$135 & Up
Imperial Palace	$50	$50	$135 & Up	Sands	$53	$53	$170 & Up
Jockey Club*	$80	$80	$80	Silverbird (recent rates)	$25	$25	$75 & Up
Landmark	$42	$42	$99 & Up	Treasury	$38	$38	$75
				Tropicana	$52	$52	$110 & Up

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